



Masafumi Seki

Tohoku Medical and Pharmaceutical University, Japan

Mechanisms and characteristic management of influenza and its related Pneumococcal pneumonia in Japan


Influenza-related pneumonia is an important complication of influenza, and it has been suggested that excessive inflammatory reactions, including “cytokine storm”, may contribute to the mechanisms underlying severe pneumonia. Human data and mouse model which co-infected with influenza virus and *Streptococcus pneumoniae* show increased severity of illness caused by the elevation of cytokines/chemokines, and mice with genetic knock-out of immune molecules such as Toll-like receptor-related IRAK-M also show hyper-immune responses and reduced survival following influenza virus infection. Such findings suggest that innate immune responses and excessive neutrophil activation might be related to severe inflammatory changes in the lungs, and immune-modulatory therapy, including macrolides, may thus be effective against severe influenza-related pneumonia. In Japan, we have five anti-influenza agents and can choose each agent dependent

on influenza and pneumonia severity. Among them, peramivir can be administered by drip infusion, and used not only for the most severe patients, but also for the ambulatory outpatients who have some medical issues. The insurance system supports early administration of them with antibiotics, and as a result, we might be able to have very low influenza-related mortality. Today, our management style for influenza, including vaccination and infection control team activity, will be introduced.

Speaker Biography

Masafumi Seki has completed his graduation in Medicine from Nagasaki University, with the specialties including Internal Medicine, Infectious Diseases, and Infection Control. Later on, he has obtained his Post-graduation and started working at Osaka University. Presently, he is working at the Tohoku Medical and Pharmaceutical University, Sendai City, Japan.

seki@hosp.tohoku-mpu.ac.jp

 Notes: